



**Centrally mounted butterfly valve
PTFE lined
Type KG 6 · KG 8 · K 16 · K 18**

- two-piece body
- **GEFA - MULTITOP**
Automation system
Exchangeable flange for direct installation

Unsurpassed benefits for the user:

- Safety
- Easy to service

This chemical valve guarantees permanent seal with full chemical resistance. Highly aggressive and corrosive media are securely blocked, controlled and regulated.





Type KG 6 [DN 50 – DN 300]

Technical data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body, self-centring, single-piece valve disc and stem, sealed to 10 bar.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type KG 8 [DN 50 – DN 300]

Technical data:

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body with threaded cam for solid flange connection from both sides, sealing to 10 bar. **Special features:** The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against a pressure from up to 10 bar depending on the temperature.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Primary seal

The primary seal for the stem coupling is engaged via spring-mounted stainless steel pressure bearings.

Between the primary sealing surface of the valve disc and the spring-loaded PTFE lining, the medium is already blocked off securely at this pressing surface (supported by an additional PTFE-elastic seal).

The valve stem does not come into contact with the medium. As an additional third barrier, a gas barrier is positioned on the stem outlet directly behind the primary seal. This "three-fold seal" secures the absolutely sealed functionality to the outside and prevents leaks into the space inside the housing behind.

This is the safest and most effective method of counteracting emissions where TA-Luft (German Technical Instructions on Air Quality Control) is concerned.

Efficient and reliable automation with the exchangeable flange

GEFA-MULTITOP

Advantages of the Butterfly valves



Technical specifications

1 Automation

- Standard mounting flange conforming to DIN 3337
- Direct-mount actuation **without interruption to the valve stem**
- Variable and exchangeable for any size of actuator
- Actuator protected against leakage

2 Two-piece body

Standard construction length; very easy to service, simple replacement of the internal parts only possible with the two-piece body construction

3 Bearing bushing with O-ring seal

4 **PTFE seat ring**
in solid construction (3 mm), diffusion-stable, guarantees permanent seal on stem coupling, on closing/sealing and to the flanges

5 **Elastomer spring element**
precisely fitted elastic ring of silicone or EPDM behind the PTFE seat ring for flexible sealing on closing

6 **PTFE valve disc**
solid (4 mm) PTFE encapsulated stainless steel disc with protective assembly on the stem in the primary sealing area

7 **Primary seal**
integrated in the seat ring, ensures a cavity-free pressure-stable seal. The contact pressure is provided by the spring-loaded bearing



Hand lever



Gear operator



Pneumatic actuator



Electric actuator



Code	Body
22	Gray iron GG25
72	Gray iron, plastic coated
44	Cast steel GS-C25
24	Ductile iron
63	Stainless steel 1.4301/1.4308
66	Stainless steel 1.4571/1.4408

Code	Disc
66	Stainless steel 1.4408
31	Stainless steel, polished
77	PTFE coated
92	Alloy C 22
93	Alloy C
94	Titanium

Code	Seat ring
T	PTFE
TK	PTFE/carbon

Technical changes reserved

Control range:
20° – 60° Opening angle

PTFE material (Fluorine plastic) provides the user with a material that can rarely be matched with another material in terms of its corrosion and chemical resistance. For lining or coating parts in contact with the medium – as with GEFA-Butterfly Valves KG 6 / KG 8 – this material has become almost indispensable.

- PTFE**
(polytetrafluorethylene)
- with EPDM elastomer
Temperature: -30 °C to +130 °C.
 - with silicone elastomer
Temperature: to +160 °C.

- PTFE / Carbon**
(Reinforced polytetrafluorethylene with 25% carbon content as filler material)
- with silicone elastomer
Temperature: to +180 °C.



TA-Luft / VDI 2440

The PTFE-lined shut-off valves are already tested and certified in the standard version based on the current guidelines of TA-Luft/VDI 2440.

The strict test requirements have been met to the full extent under constant load and continuous operation as well as under temperature and pressure from the valves.

Result: 1×10^{-4} mbar x ltr./(s x m) as specific leakage rates are considerably undercut.

The specified requirements in regard to TA-Luft have been demonstrably exceeded by the valves.

User's advantage: A shut-off valve with secure characteristics regarding sealing, functionality and life-span. References confirm the excellent quality of this impressive valve technology.

Available Materials



Function and Effect



Type K 16 [DN 350 – DN 600]

Technical data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body, self-centring, single-piece valve disc and stem, sealed to 10 bar.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1
DIN 3230, T5, T6



Type K 18 [DN 350 – DN 600]

Technical data:

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10, ANSI 150. **Two-piece body with threaded cam** for a fixed flange connection from both sides. Single-piece valve disc and stem.

Special features: The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against a pressure from up to 10 bar depending on the temperature.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1
DIN 3230, T5, T6

With the chemical valve – PTFE-lined and centrally mounted – aggressive and corrosive media are securely blocked, controlled and regulated.

The PTFE guarantees almost unlimited application with full chemical resistance. In important areas, the minimum material thickness is even exceeded, guaranteeing high diffusion stability. Only two components come into contact with the medium: the valve disc and seat ring. Thanks to its absolute cavity-free construction and the physiologically neutral characteristics of the PTFE material that is in contact with the product, its typical application is in food manufacture and pharmaceuticals.

The dual spring principle behind the seat ring guarantees a permanent seal in the opening.

- With the „Spring element“ elastomer insert behind the PTFE lining, the sealing functionality is achieved over the entire circumference of the opening.
- The primary seal of the stem coupling is dampened separately with precisely adjusted spring-collars behind the PTFE.



KG 6 - 22 66 T DN 150 / PN 10



Ordering example



GEFA Processtechnik GmbH Dortmund is a specialised manufacturing operation in the industrial valve, filtration technology and measurement and control technology sectors. The company was founded in 1964 and was one of the first to carry the three-piece ball valve, soft-seated butterfly valves and pneumatic rack & pinion actuators. In the filtration technology sector, an innovative product line was introduced to the German market by GEFA. The company has been certified since 1992 in accordance with EN ISO 9001 and offers products of the highest reliability and safety. We also have a broad product range available for specific applications. The extensive inventory (5 million euro) guarantees short delivery times.

Our product range

Valves • Butterfly valves • Ball valves • Knife gate valves • Pinch valves • Non-return valves
• Actuators • Compressed air operated diaphragm pumps • Bursting discs • Special valves

Filtration • Fine filtration • Micro filtration • Manual filters • Separation and handling technology

Messuring and control technology • Flow measurements • Signal processing modules
Switching cabinet construction • Pressure transmitters • Temperature measurements

edition: 03-2015



Germany

Germaniastraße 28
D-44379 Dortmund

P.O. Box 70 01 10
D-44371 Dortmund



Phone 0049-2 31-610 09-0
Fax 0049-2 31-610 09 80

www.gefa.com
gefa@gefa.com